# **Duke Energy Carolinas Spring 2007 Forecast**



Sales

Rates Billed

Peaks

2007-2017

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#### Regular Sales and System Peak Summer (2007 Forecast vs. 2008 Forecast)

Regular sales includes total Retail and Full/Partial Requirements Wholesale sales (as defined on page 7). The system peak summer demand includes all MW demands associated with Retail classes, Schedule 10A Resale and the total resource needs of the Catawba Joint Owners (as defined on page 17).

	Growth Statistics from 2007 to 2008										
	Forecasted 2007 Forecasted 2008		Growth								
Item	Amount	Amount	Amount	%							
Regular Sales System Peak Summer	79,573 GWH 20,440 MW	80,701 GWH 20,828 MW	1,128 GWH 388 MW	1.4% 1.9%							

#### Regular Sales Outlook for the Forecast Horizon (2006 – 2017)

Total Regular sales are expected to grow at an average annual rate of 1.9% from 2006 through 2017. Growth rates for all retail classes of sales are less than the growth projections in the Spring 2006 forecast. The Full/Partial Requirements Wholesale class forecast will increase due to a change in an agreement between Duke Energy Carolinas (DEC) and Blue Ridge Electric Membership Corporation (BREMC). From June 2007 forward, DEC will provide all of the supplemental requirements of BREMC. In the 2006 forecast, DEC was to provide only a portion of the supplemental requirements of BREMC from 2006 to 2010 and all of the supplemental requirements from 2011 forward. (There was no change in the same type agreement with Piedmont EMC and Rutherfordton EMC.). Also, another contract between DEC and the North Carolina Electric Membership Corporation (NCEMC) will provide additional hourly electricity sales to NCEMC beginning in 2009.

Comparison of Regular Sales Growth Statistics Spring 2007 Forecast vs. Spring 2006 Forecast										
Spring 2007 Forecast Annual Growth (2006-2017)			Spring 2006 Forect Annual Growth (2006-2017)	Average Annual Difference <sup>1</sup>						
ltem	Amount	%	Amount	%						
Regular Sales:										
Residential	535 GWH	1.9%	543 GWH	2.0%	-7	GWH				
Commercial	716 GWH	2.5%	779 GWH	2.7%	-63	GWH				
Industrial (total)	-25 GWH	-0.1%	80 GWH	0.3%	-105	GWH				
Textile	-244 GWH	-5.5%	-188 GWH	-3.9%	-56	GWH				
Other Industrial	219 GWH	1.1%	268 GWH	1.3%	-49	GWH				
Other <sup>2</sup>	4 GWH	1.3%	4 GWH	1.3%	0	GWH				
Full/Partial Wholesale 3	404 GWH	13.0%	368 GWH	12.4%	35	GWH				
Total Regular	1,633 GWH	1.9%	1,774 GWH	2.1%	-141	GWH				

<sup>&</sup>lt;sup>1</sup> Average annual differences may not match due to rounding

#### System Peak Outlook for the Forecast Horizon (2006 - 2017)

System peak hour demands are forecasted on a summer and winter basis. The system peak summer demand on the Duke Energy Carolinas is expected to grow at an average annual rate of 1.8% from 2006 through 2017. The system peak winter demand is expected to grow at an average annual rate of 1.4% from 2006 through 2017.

	Comparison of System Peak Demand Growth Statistics Spring 2007 Forecast vs. Spring 2006 Forecast									
	Spring 2007 Annual G (2006-20	rowth	Spring 2006 Forecast Annual Growth (2006-2017)			Average Annual Difference <sup>1</sup>				
Item	Amount	%	Amou	ınt	%					
System Peaks Summer Winter	391 MW 275 MW	1.8% 1.4%	389 262	MW MW	1.8% 1.4%	2 MW 13 MW				

<sup>&</sup>lt;sup>2</sup> Other sales consist of Street and Public Lighting and Traffic Signal GWH sales.

<sup>&</sup>lt;sup>3</sup> Full/Partial Wholesale sales include Schedele 10A sales and supplemental sales to the NC EMCs.

#### Other Forecasts

- The number of rates billed is forecasted for the Residential, Commercial and Industrial classes of Duke Energy Carolinas. The total number of rates billed is expected to grow at 1.5% annually over the forecast horizon.
- Nantahala Power & Light ("NP&L") is an operating division of Duke Energy Carolinas. NP&L forecasts include the following:
  - NP&L sales are expected to grow at an average annual rate of 2.2% from 2006 through 2017.
  - NP&L number of rates billed is expected to grow 2.0% annually over the forecast horizon.
  - NP&L summer peak demand (coincident with Duke's system peak) is expected to grow an average annual rate of 9 MW from 2007 through 2017.
- The total annual energy requirements of the Catawba Joint Owners are forecasted to grow at 2.5% annually over the forecast horizon.
- Territorial energy requirements (as defined on page 19) are forecasted to grow from 103,625 GWH in 2007 to 122,490 GWH in 2017, for an average annual growth rate of 1.7%.

#### General forecasting methodology for Duke Energy Carolinas energy and demand forecasts for Spring 2007

Duke Energy Carolinas' Spring 2007 forecasts represent projections of the energy and peak demand needs for its service area, which is located within the states of North and South Carolina, including the major urban areas of Charlotte, Greensboro and Winston-Salem in North Carolina and Spartanburg and Greenville in South Carolina. The forecasts cover the time period of 2007 – 2017 and represent the energy and peak demand needs for the Duke Energy Carolinas system comprised of the following customer classes and other utility/wholesale entities:

- Residential
- Commercial
- Textiles
- · Other Industrial
- Other Retail
- Nantahala Power & Light
- Duke Energy Carolinas full /partial requirements wholesale
- Catawba Joint Owners' energy requirements
- Territorial energy requirements

Energy use is dependent upon key economic factors such as income, energy prices and employment along with weather. The general framework of the Company's forecast methodology begins with forecasts of regional economic activity, demographic trends and expected long-term weather. The economic forecasts used in the Spring 2007 forecasts are obtained from Moody's Economy.com, a nationally recognized economic forecasting firm, and include economic forecasts for the two states of North Carolina and South Carolina. These economic forecasts represent long-term projections of numerous economic concepts including the following:

- Total gross state product (GSP) in NC and SC
- Non-manufacturing GSP in NC and SC
- Non-manufacturing employment in NC and SC
- Manufacturing GSP in NC and SC by industry group, e.g., textiles
- Employment in NC and SC by industry group
- Total personal income

Total population forecasts are obtained from the two states' demographic offices for each county in each state which are then used to derive the total population forecast for the 46 counties that the Company serves in the Carolinas.

### General forecasting methodology (continued)

A projection of weather variables, cooling degree days (CDD) and heating degree days (HDD), are made for the forecast period by examining long-term historical weather. For the Spring 2007 forecasts, a 10 year simple average of CDD and HDD were used.

Other factors influencing the forecasts are identified and quantified such as changes in wholesale power contracts, historical billing days and other demographic trends including housing square footage, etc.

Energy forecasts for all of the Company's retail customers are developed at a customer class level, i.e., residential, commercial, textile, other industrial and street lighting along with forecasts for its wholesale customers. Econometric models incorporating the use of industrystandard linear regression techniques were developed utilizing a number of key drivers of energy usage as outlined above. The following provides information about the models.

#### Residential Class:

The Company's residential class sales forecast is comprised of two separate and independent forecasts. The first is the number of residential rates billed which is driven by population projections of the counties in which the Company provides electric service. The second forecast is energy usage per rate billed which is driven primarily by regional economic and demographic trends. The total residential sales forecast is derived by multiplying the two forecasts together.

#### Commercial Class:

Commercial electricity usage changes with the level of regional economic activity and the impact of weather.

#### Textile Class:

The level of electricity consumption by Duke Energy Carolinas' textile group is very dependent on foreign competition. Usage is also impacted by the level of textile manufacturing output, exchange rates, electric prices and weather.

#### Other Industrial Class:

Electricity usage for Duke's other industrial customers was forecasted by nine groups according to the 3 digit NAICS classification and then aggregated to provide the overall other industrial sales forecast. Usage is driven primarily by regional manufacturing output at a 3 digit NAICS level, electric prices and weather.

#### Other Retail Class:

This class in comprised of public street lighting and traffic signals within the Company's service area. The level of electricity usage is impacted not only by economic growth but also by advances in lighting efficiencies.

#### General forecasting methodology (continued)

#### Full / Partial Requirements Wholesale:

Duke Energy Carolinas provides electricity on a contract basis to numerous wholesale customers. The forecast of wholesale sales for this group is developed in two parts: 1) sales provided under the Company's Schedule 10A and driven primarily by regional economic and demographic trends and 2) special contracted sales agreements with other wholesale customers including adjustments for any known or anticipated changes in wholesale contracts.

#### Catawba Joint Owners:

Their forecast of electricity consumption is driven primarily by regional economic and demographic trends.

#### Territorial Energy:

Territorial energy is the summation of all the Company's retail sales, full/partial requirement wholesale sales, Nantahala Power & Light's retail and wholesale sales, the Catawba Joint Owners' loads, line losses and company use.

Similarly, Duke Energy Carolinas' forecasts of its annual summer and winter peak demand forecasts uses econometric linear regression models that relate historical annual summer/winter peak demands to key drivers including daily temperature variables (such as daily sum of heating degree hours from 7 to 8AM in the winter with a base of 60 degrees and the daily sum of cooling degree hours from 1 to 5PM in the summer with a base of 69 degrees) and the monthly electricity usage of the entity to be forecasted.

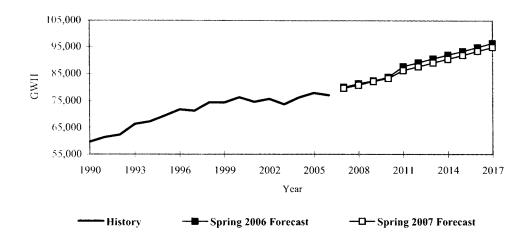
Regular Sales, which includes billed sales to Retail and Full/Partial Requirements Wholesale classes, are expected to grow at 1,633 GWH per year or 1.9% over the forecast horizon. Retail sales include GWH sales billed to the Residential, Commercial, Industrial, Street and Public Lighting, and Traffic Signal Service classes. Full/Partial Requirements Wholesale sales include GWH sales billed to municipalities and public utility companies that purchase their full power requirements from the Company, except for power supplied by parallel operation of generation facilities, plus in the forecast period, supplemental sales to specified EMCs in North Carolina.

Regular Sales, as defined here, exclude Nantahala Power & Light's ("NP&L") retail and wholesale GWH sales. NP&L is an operating division of Duke Energy Carolinas. Electric energy sales for NP&L are forecasted separately and included in the Duke Energy Carolinas' Territorial Energy forecast

#### Points of Interest

- The <u>Residential</u> class continues to show positive growth, driven by steady gains in population within the Duke Energy Carolinas service area. The resulting annual growth in Residential billed sales is expected to average 1.9% over the forecast horizon.
- The <u>Commercial</u> class is projected to be the fastest growing retail class, with billed sales growing at 2.5% per year over the next ten years. Three sectors that contributed greatly to total Commercial sales growth from 2005 to 2006 were: Offices (178 GWH growth), Medical (70 GWH growth) and Education (63 GWH growth).
- The <u>Industrial</u> class continues to struggle due to Textiles. Over the forecast horizon, the closing of Textile plants is expected to continue. In the Other Industrial class, however, several sectors are expected to show strong growth. These include: Autos, Rubber & Plastics and Chemicals (excluding Man-Made Fibers). As a result, Total Industrial sales are expected to be almost flat over the forecast horizon.
- The <u>Full/Partial Requirements Wholesale</u> class is expected to grow at 13% annually over the forecast horizon, primarily due to the forecasted supplemental sales to specified EMCs in North Carolina.

# Regular Billed Sales (Sum of Retail and Full/Partial Wholesale classes)

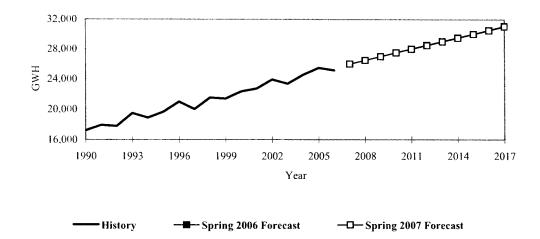


#### HISTORY

#### AVERAGE ANNUAL GROWTH

Year	Actual GWH	GWH	Growth %	<del></del>		GWH Per Year	% Per Year
2002	75,600	1,120	1.5	History (2001 to	2006)	495	0.7
2003	73,579	-2,020	-2.7	History (1991 to	2006)	1041	1.5
2004	76,137	2,558	3.5				
2005	77,824	1.687	2.2	Spring 2007 Fore	cast (2006 to 2017)	1633	1.9
2006	76,954	-870	-1.1	Spring 2006 Fore	ecast (2006 to 2017)	1774	2.1
SPRIN	G 2007 FOR	RECAST		SPRING 2000	6 FORECAST		==
		Grov	vth		Difference from	n Spring 2006	
Year	GWH	GWH	%	GWH	GWH	%	
2007	79,573	2,620	3.4	79,965	-392	-0.5	
2008	80,701	1,128	1.4	81,269	-567	-0.7	
2009	82,121	1,419	1.8	82,384	-263	-0.3	
2010	83,245	1,125	1.4	83,705	-459	-0.5	
2011	86,256	3,010	3.6	87,668	-1,413	-1.6	
2012	87,640	1,385	1.6	89,157	-1,517	-1.7	
2013	89,069	1,429	1.6	90,582	-1,513	-1.7	
2014	90,446	1,377	1.5	91,974	-1,528	-1.7	
2015	91,853	1,407	1.6	93,400	-1,546	-1.7	
2016	93,434	1,581	1.7	94,893	-1,458	-1.5	
2017	94.918	1,484	1.6	96,464	-1,546	-1.6	

# Residential Billed Sales



#### **HISTORY**

**GWH** 

Growth

%

Actual GWH

Year

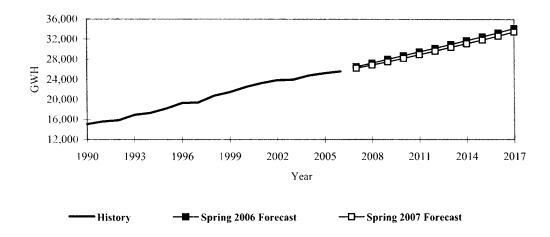
#### **AVERAGE ANNUAL GROWTH**

GWH Per Year

2002	23,898	1,179	5.2	History (2001 to 2	2006)	486	2.1
2003	23,356	-542	-2.3	History (1991 to 2	2006)	482	2.3
2004	24,543	1,186	5.1				
2005	25,460	917	3.7	Spring 2007 Foree	cast (2006 to 2017)	535	1.9
2006	25.147	-313	-1.2	Spring 2006 Fore	cast (2006 to 2017)	543	2.0
SPRING	G 2007 FOR	RECAST		SPRING 2006	FORECAST		
		Grow	/th		Difference from	Spring 2006	
Year	GWH	GWH	%	GWH	GWH	%	
2007	25.984	837	3.3	25,974	10	0.0	
2008	26.484	500	1.9	26,491	-7	0.0	
2009	26.995	511	1.9	27,017	-22	-0.1	
2010	27,508	513	1.9	27,529	-21	-0.1	
2011	28,001	493	1.8	28,039	-37	-0.1	
2012	28,494	493	1.8	28,544	-50	-0.2	
2013	28,990	496	1.7	29,042	-52	-0.2	
2014	29,487	497	1.7	29,540	-53	-0.2	
2015	29,994	507	1.7	30,042	-47	-0.2	
2016	30.512	518	1.7	30,575	-62	-0.2	
2017	31.032	520	1.7	31,115	-82	-0.3	

% Per Year

#### Commercial Billed Sales

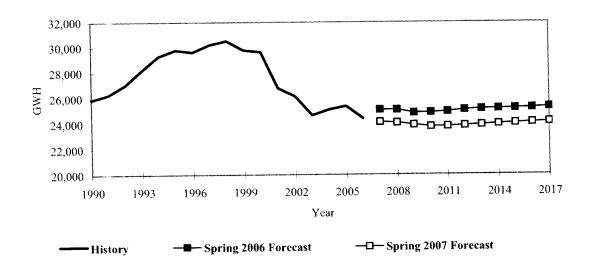


#### **HISTORY**

#### **AVERAGE ANNUAL GROWTH**

Year	Actual GWH	GWH	Growth %			GWH Per Year	% Per Year
2002	23,831	549	2.4	History (2001 to 2	006)	461	1.9
2003	23,933	102	0.4	History (1991 to 2	006)	667	3.4
2004	24,775	842	3.5				
2005	25,236	460	1.9	Spring 2007 Forec	east (2006 to 2017)	716	2.5
2006	25,585	349	1.4	Spring 2006 Forec	east (2006 to 2017)	779	2.7
SPRIN	G 2007 FOF	RECAST		SPRING 2006	FORECAST		
		Gro	wth		Difference fron	n Spring 2006	
Year	GWH	GWH	%	GWH	GWH	%	
2007	26,215	630	2.5	26,497	-283	-1.1	
2008	26,836	621	2.4	27,240	-404	-1.5	
2009	27,477	641	2.4	28,000	-523	-1.9	
2010	28,172	695	2.5	28,733	-561	-2.0	
2011	28,904	732	2.6	29,465	-561	-1.9	
2012	29,650	746	2.6	30,202	-552	-1.8	
2013	30,393	744	2.5	30,956	-563	-1.8	
2014	31,117	724	2.4	31,714	-597	-1.9	
2015	31,861	744	2.4	32,494	-633	-1.9	
2016	32,637	776	2.4	33,301	-664	-2.0	
2017	33,456	818	2.5	34,150	-695	-2.0	

# Total Industrial Billed Sales (includes Textile and Other Industrial)



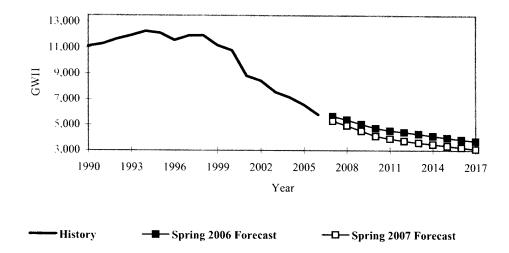
#### **HISTORY**

#### AVERAGE ANNUAL GROWTH

Year	Actual GWH	GWH	Growth		GWH Per Year	% Per Year
2002	26.141	-643	-2.4	History (2001 to 2006)	-478	-1.9
2002 2003	26,141 24,645	-043 -1,496	-2. <del>4</del> -5.7	History (1991 to 2006)	-125	-0.5
2003	25,085	440	1.8	•		
2005	25,361	277	1.1	Spring 2007 Forecast (2006 to 2017)	-25	-0.1
2006	24,396	-965	-3.8	Spring 2006 Forecast (2006 to 2017)	80	0.3
CDDIN	C 2007 FOI	RECAST		SPRING 2006 FORECAST		

Year		Grow	·th		Difference from Spring 2006		
Year	GWH	GWH	%	GWH	GWH	0/0	
2007	24,119	-277	-1.1	25,080	-961	-3.8	
2007	24,066	-53	-0.2	25,074	-1,008	-4.0	
2009	23,900	-166	-0.7	24,837	-937	-3.8	
2010	23,755	-145	-0.6	24,856	-1,102	-4.4	
2010	23,775	21	0.1	24,923	-1,147	-4.6	
	23,829	54	0.2	25,060	-1,231	-4.9	
2012		65	0.3	25,122	-1,228	-4.9	
2013	23,894	63	0.3	25,148	-1,191	-4.7	
2014	23,957	62	0.3	25,181	-1,163	-4.6	
2015	24,018			25,216	-1,144	-4.5	
2016	24,071	53	0.2	25,277	-1,157	-4.6	
2017	24,120	48	0.2	23,277	1,157		

#### **Textile Billed Sales**



#### **HISTORY**

**GWH** 

Growth

%

Actual

**GWH** 

Year

#### **AVERAGE ANNUAL GROWTH**

**GWH** 

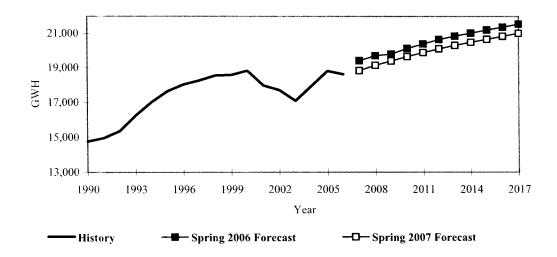
Per Year

%

Per Year

2002	8,443	-382	-4.3	History (2001 to	2006)	-607	-8.1
2003	7,562	-881	-10.4	History (1991 to 2006)		-368	-4.4
2004	7,147	-415	-5.5	• `	,		
2005	6,561	-586	-8.2	Spring 2007 For	ecast (2006 to 2017)	-244	-5.5
2006	5,791	-770	-11.7		ecast (2006 to 2017)	-188	-3.9
SPRIN	G 2007 FOI	RECAST		SPRING 200	6 FORECAST		
		Grov	vth		Difference from	Spring 2006	
Year	GWH	GWH	<sup>0</sup> / <sub>0</sub>	GWH	GWH	%	
2007	5,302	-489	-8.4	5,673	-372	-6.5	
2008	4,936	-366	-6.9	5,385	-449	-8.3	
2009	4,517	-419	-8.5	5,047	-529	-10.5	
2010	4,115	-402	-8.9	4,736	-621	-13.1	
2011	3,903	-212	-5.1	4,541	-637	-14.0	
2012	3,735	-169	-4.3	4,414	-679	-15.4	
2012	3,595	-140	-3.7	4,277	-682	-15.9	
2013							
2013	3,468	-127	-3.5	4,121	-653	-15.8	
	3,468 3,352	-127 -115	-3.5 -3.3	4,121 3,971	-653 -618	-15.8 -15.6	
2014				*			

# Other Industrial Billed Sales



#### **HISTORY**

**GWH** 

Actual

**GWH** 

Year

Growth

%

#### **AVERAGE ANNUAL GROWTH**

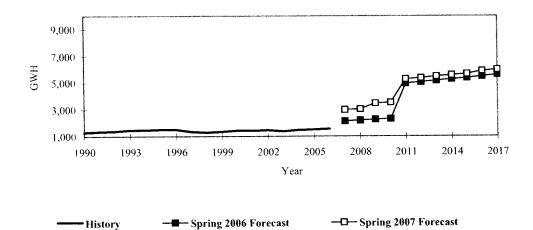
**GWH** 

Per Year

%

Per Year

2002	17,698	-261	-1.5	History (2001 to 20	06)	129	0.7
2003	17,083	-615	-3.5	History (1991 to 20	06)	243	1.5
2004	17,938	855	5.0	•			
2005	18,800	862	4.8	Spring 2007 Foreca	st (2006 to 2017)	219	1.1
2006	18,605	-195	-1.0	Spring 2006 Foreca	ast (2006 to 2017)	268	1.3
SPRIN	G 2007 FOI	RECAST		SPRING 2006	FORECAST		<u> </u>
		Grow	th		Spring 2006		
Year	GWH	GWH	%	GWH	GWH	%	
2007	18,817	212	1.1	19,407	-590	-3.0	
2008	19,129	312	1.7	19,689	-559	-2.8	
2009	19,382	253	1.3	19,790	-408	-2.1	
2010	19,640	257	1.3	20,120	-480	-2.4	
2011	19,872	232	1.2	20,382	-510	-2.5	
2012	20,094	222	1.1	20,646	-552	-2.7	
2013	20,299	204	1.0	20,845	-547	-2.6	
2014	20,489	190	0.9	21,027	-538	-2.6	
2015	20,666	177	0.9	21,210	-544	-2.6	
2016	20,842	176	0.9	21,379	-537	-2.5	
2017	21,018	176	0.8	21,557	-539	-2.5	



#### **HISTORY**

#### AVERAGE ANNUAL GROWTH

Year	Actual GWH	GWH	Growth %		GWH Per Year	% Per Year
2002	1,460	45	3.2	History (2001 to 2006)	28	1.9
2002	1,377	-84	-5.7	History (1991 to 2006)	14	1.0
2004	1,467	91	6.6			
2005	1.500	33	2.3	Spring 2007 Forecast (2006 to 2017)	404	13.0
2006	1,557	57	3.8	Spring 2006 Forecast (2006 to 2017)	368	12.4

#### **SPRING 2007 FORECAST**

		Grov	vth		Difference from Spring 2006		
Year	GWH	GWH	%	GWH	GWH	%	
2007	2.986	1,429	91.8	2,142	844	39.4	
2008	3.042	56	1.9	2,188	854	39.0	
2009	3,471	429	14.1	2,250	1,221	54.3	
2010	3,528	58	1.7	2,303	1,225	53.2	
2011	5,289	1,761	49.9	4,954	335	6.8	
2012	5,377	88	1.7	5,060	317	6.3	
2013	5.497	120	2.2	5,166	331	6.4	
2013	5,587	89	1.6	5,273	314	6.0	
2015	5,677	91	1.6	5,380	297	5.5	
2016	5,907	230	4.0	5,494	413	7.5	
2017	6,000	93	1.6	5,610	389	6.9	

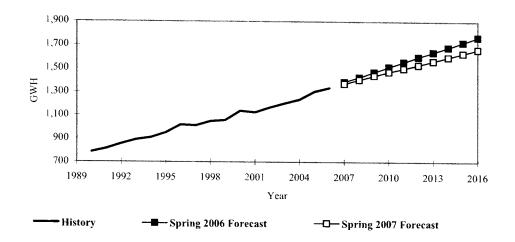
<sup>1</sup> Schedule 10A Resale Sales does not include SEPA allocation.

<sup>2</sup> As of 1997, Duke no longer provides the electric energy requirements for the towns of Seneca and Greenwood, South Carolina.

NP&L Sales includes billed sales to the Residential, Commercial, Industrial, Public Street and Highway Lighting and Wholesale classes served by the company formally known as the Nantahala Power and Light Company.

The NP&L billed sales forecast is lower than the previous forecast, primarily due to a slower growing local economy as compared to the previous economic projections. NP&L sales typically account for about 1% of the annual territorial energy requirements.

# NP&L Billed Sales



#### **HISTORY**

**GWH** 

Growth

%

Actual

**GWH** 

Year

#### **AVERAGE ANNUAL GROWTH**

**GWH** 

Per Year

%

Per Year

2002	1,169	43	3.8	History (2001 to	2006)	42	3.5		
2003	1,205	36	3.1	History (1991 to	2006)	35	3.4		
2004	1,237	32	2.7	3 (		50	5.1		
2005	1,307	69	5.6	Spring 2007 Forecast (2006 to 2017)		33	2.2		
2006	1,337	30	2.3		ecast (2006 to 2017)	43	2.8		
SPRIN	G 2007 FOI	RECAST		SPRING 200	6 FORECAST				
		Grow	th	Difference from Spring 2006					
Year	GWH	GWH	%	GWH	GWH	%			
2007	1,372	35	2.6	1,388	-16	-1.2			
2008	1,406	34	2.5	1,429	-22	-1.6			
2009	1,440	34	2.4	1,472	-31	-2.1			
2010	1,473	33	2.3	1,514	-41	-2.7			
2011	1,503	30	2.0	1,557	-54	-3.5			
2012	1,533	30	2.0	1,599	-66	-4.1			
2013	1,565	32	2.1	1,641	-76	-4.6			
2014	1,598	33	2.1	1,682	-84	-5.0			
2015	1,631	33	2.1	1,724	-93	-5.4			
2016	1,664	33	2.0	1,768	-105	-5.9			
2017	1,696	33	2.0	1,813	-117	-6.4			

Duke Energy Carolinas owns 12.5% of the capacity of the Catawba Nuclear Station Units 1 and 2.

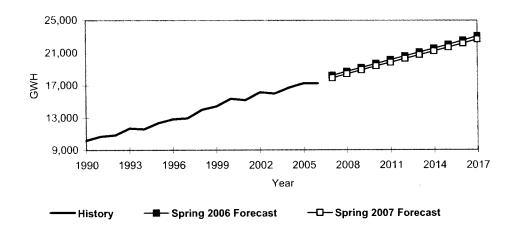
The remaining 87.5% is owned by the North Carolina Municipal Power Agency #1 (37.5%), Piedmont Municipal Power Agency (12.5%), North Carolina Electric Membership Corporation (28.1%) and Saluda River Electric Cooperative, Inc. (9.4%).

(In December 2006 Duke Energy Carolinas and North Carolina Electric Membership Corporation announced agreements to buy Saluda River Electric Cooperative, Inc.'s ownership interest in unit 1 of the Catawba Nuclear Station. Duke Energy Carolinas will then own 19.3% of the capacity of the Catawba Nuclear Station Units 1 and 2 and North Carolina Electric Membership Corporation will own 30.7% of the capacity of the Catawba Nuclear Station Units 1 and 2.)

In addition to the power supplied from the ownership share in the Catawba stations, each Catawba Joint Owner must purchase supplemental power to meet its total energy requirements. The Catawba forecast represents the total energy requirements of the Catawba Joint Owners.

 Total Catawba electric energy requirements are expected to increase at an average annual growth of 496 GWH per year and a growth rate of 2.5 % per year over the period from 2006-2017.

# Catawba Total Delivered Energy Requirements



#### **HISTORY**

#### **AVERAGE ANNUAL GROWTH**

YEAR	Actual		GROWTH		GWH Per Year	% Per Year
	GWH	GWH	%		rei i eai	1 CI I CAI
2002	16,151	967	6.4	History (2001 to 2006)	412	2.6
2003	15,986	-165	-1.0	History (1991 to 2006)	438	3.3
2004	16,711	725	4.5			
2005	17,237	527	3.2	Spring 2007 Forecast (2006 to 2017)	496	2.5
2006	17,246	9	0.0	Spring 2006 Forecast (2006 to 2017)	531	2.7

#### **SPRING 2007 FORECAST**

		Grow	th		Difference from Spring 2006		
Year	GWH	GWH	0/0	GWH	GWH	%	
2007	17,910	664	3.8	18,229	-319	-1.7	
2008	18,401	492	2.7	18,718	-317	-1.7	
2009	18,898	496	2.7	19,201	-303	-1.6	
2010	19,386	488	2.6	19,680	-294	-1.5	
2011	19,845	459	2.4	20,161	-316	-1.6	
2012	20,300	456	2.3	20,630	-329	-1.6	
2013	20,763	463	2.3	21,102	-338	-1.6	
2014	21,235	471	2.3	21,574	-339	-1.6	
2015	21,715	480	2.3	22,050	-335	-1.5	
2016	22,205	490	2.3	22,560	-355	-1.6	
2017	22,707	502	2.3	23,082	-375	-1.6	

<sup>1</sup> Total Delivery for Catawba Joint Owners includes SEPA allocations.

Territorial energy requirements consist of:

- . Regular Sales (excluding supplemental sales to NC EMCs)
- . NP&L Sales
- . Catawba Joint Owner energy requirements
- . Southeastern Power Administration ("SEPA") energy allocations that are wheeled to municipal and cooperative electric systems within the Duke Energy Carolinas' service area
- . Duke Energy Carolinas company use
- . System losses and unbilled energy

Territorial energy requirements are forecasted to grow 1.7% per year from 2007 to 2017. All values below are expressed in GWH.

Year	Regular Sales	Catawba (Less SEPA) Total	SEPA	Company Use	SNP&L	Losses & Unbilled	Territorial Energy
2007	78,186	17,610	311	214	1,372	5,932	103,625
2008	79,300	18,101	311	214	1,406	6,014	105,347
2009	80,331	18,597	311	214	1,440	6,102	106,996
2010	81,437	19,086	311	214	1,473	6,199	108,720
2011	82,724	19,545	311	214	1,503	6,302	110,598
2012	84,056	20,000	311	214	1,533	6,409	112,522
2013	85,402	20,463	311	214	1,565	6,517	114,471
2014	86,728	20,934	311	214	1,598	6,623	116,408
2015	88,083	21,414	311	214	1,631	6,732	118,385
2016	89,472	21,904	311	214	1,664	6,844	120,409
2017	90,904	22,407	311	214	1,696	6,959	122,490

Regular Sales represents total electricity used by Duke Energy Carolinas Retail and Schedule 10A Resale classes. Supplemental sales to NC EMCs are not included in this column.

Catawba Total represents Catawba Joint Owner electricity requirements less their SEPA allocations.

SEPA represents hydro energy allocated to the municipalities and co-operatives and wheeled by Duke Energy Carolinas.

<sup>&</sup>lt;sup>1</sup>Company Use represents electricity used by Duke Energy Carolinas offices and facilities.

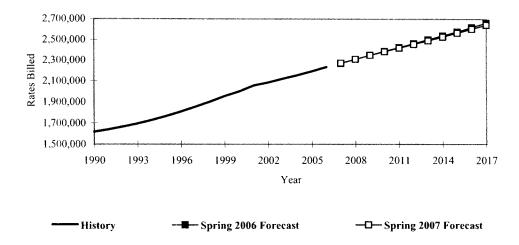
SNP&L represents electricity used by all customers served by Nantahala Power & Light Company.

<sup>\*</sup>Losses represent electricity line losses from generation sources to customer meters. NP&L losses are included.

Unbilled Sales represent the adjustment made to create calendar period sales from billing period sales. NP&L unbilled is included.

#### **Total Rates Billed**

(Sum of Major Retail Classes: Residential, Commercial and Industrial)



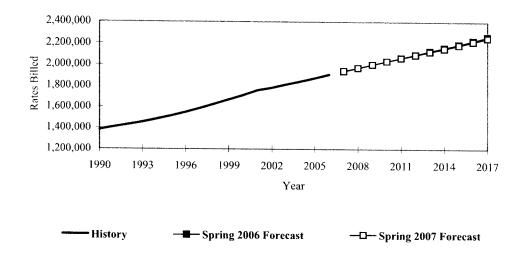
#### **HISTORY**

#### **AVERAGE ANNUAL GROWTH**

Year	Actual Rates Billed	Growth Rates Billed	%		Rates Billed Per Year	% Per Year
2002	2,083,845	29,253	1.4	History (2001 to 2006)	35,900	1.7
2003	2,121,236	37,391	1.8	History (1991 to 2006)	39,633	2.1
2004	2,154,613	33,377	1.6	• 1		
2005	2,193,265	38,653	1.8	Spring 2007 Forecast (2006 to 2017)	37,264	1.5
2006	2,234,093	40,828	1.9	Spring 2006 Forecast (2006 to 2017)	39,024	1.6
SPRIN	G 2007 FORE	CAST		SPRING 2006 FORECAST		

		Growth		Difference from Sp	ring 2006	
Year	Rates Billed	Rates Billed	%	Rates Billed	Rates Billed	%
2007	2,272,484	38,391	1.7	2,269,947	2,538	0.1
2008	2,309,457	36,973	1.6	2,308,873	584	0.0
2009	2,347,090	37,633	1.6	2,348,343	-1,253	-0.1
2010	2,384,522	37,432	1.6	2,386,805	-2,283	-0.1
2011	2,420,187	35,665	1.5	2,424,930	-4,742	-0.2
2012	2,455,791	35,603	1.5	2,463,283	-7,493	-0.3
2013	2,491,777	35,986	1.5	2,501,781	-10,004	-0.4
2014	2,528,557	36,780	1.5	2,540,368	-11,811	-0.5
2015	2,566,137	37,580	1.5	2,579,399	-13,262	-0.5
2016	2,604,564	38,427	1.5	2,621,035	-16,471	-0.6
2017	2,644,002	39,438	1.5	2,663,352	-19,350	-0.7

# Residential Rates Billed



#### **HISTORY**

Growth

%

1.4

**Rates Billed** 

24,443

Actual Rates Billed

1,782,384

Year

2002

#### **AVERAGE ANNUAL GROWTH**

Rates Billed Per Year

30,181

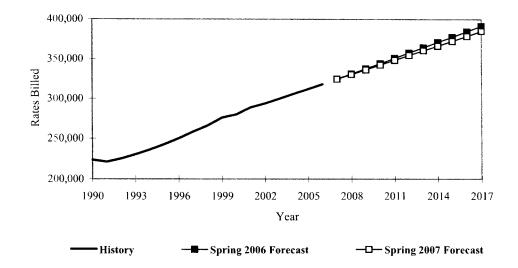
% Per Year

1.7

2003	1,813,884	31,500	1.8	History (1991 to 2	2006)	33,271	2.0
2004	1,841,378	27,495	1.5		•	•	
2005	1,873,990	32,612	1.8	Spring 2007 Fore	cast (2006 to 2017)	31,219	1.5
2006	1,908,844	34,854	1.9		cast (2006 to 2017)	32,320	1.6
SPRING 2007 FORECAST				SPRING 2006	FORECAST		
		Growth			Difference from Spi	ring 2006	
Year	Rates Billed	Rates Billed	%	Rates Billed	Rates Billed	%	
2007	1,941,094	32,250	1.7	1,937,949	3,145	0.2	
2008	1,972,059	30,965	1.6	1,970,479	1,580	0.1	
2009	2,003,684	31,624	1.6	2,003,461	223	0.0	
2010	2,035,072	31,389	1.6	2,035,247	-175	0.0	
2011	2,064,719	29,647	1.5	2,066,780	-2,060	-0.1	
2012	2,094,316	29,597	1.4	2,098,414	-4,098	-0.2	
2013	2,124,516	30,200	1.4	2,130,189	-5,673	-0.3	
2014	2,155,382	30,865	1.5	2,162,072	-6,690	-0.3	
2015	2,186,914	31,532	1.5	2,194,367	-7,453	-0.3	
2016	2,219,157	32,243	1.5	2,229,113	-9,956	-0.4	
2017	2,252,253	33,096	1.5	2,264,369	-12,116	-0.5	

History (2001 to 2006)

# Commercial Rates Billed



#### **HISTORY**

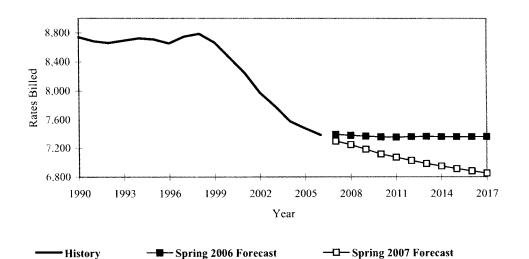
#### **AVERAGE ANNUAL GROWTH**

Year	Actual Rates Billed	Growth Rates Billed	%		Rates Billed Per Year	% Per Year
2002	293,486	5,085	1.8	History (2001 to 2006)	5,892	2.0
2003	299,564	6,078	2.1	History (1991 to 2006)	6,448	2.4
2004	305,656	6,093	2.0			
2005	311,796	6,140	2.0	Spring 2007 Forecast (2006 to 2017)	6,094	1.8
2006	317,863	6,066	1.9	Spring 2006 Forecast (2006 to 2017)	6,705	1.9

#### **SPRING 2007 FORECAST**

			Difference from Sp	ring 2006		
Year	Rates Billed	Rates Billed	%	Rates Billed	Rates Billed	%
2007	324,089	6,226	2.0	324,604	-516	-0.2
2008	330,147	6,059	1.9	331,014	-867	-0.3
2009	336,222	6,074	1.8	337,513	-1,291	-0.4
2010	342,330	6,108	1.8	344,198	-1,868	-0.5
2011	348,396	6,065	1.8	350,793	-2,397	-0.7
2012	354,448	6,052	1.7	357,509	-3,061	-0.9
2013	360,275	5,827	1.6	364,225	-3,950	-1.1
2014	366,227	5,952	1.7	370,934	-4,707	-1.3
2015	372,309	6,081	1.7	377,671	-5,362	-1.4
2016	378,525	6,217	1.7	384,561	-6,036	-1.6
2017	384,899	6,373	1.7	391,620	-6,721	-1.7

# Total Industrial Rates Billed (Includes Textile and Other Industrial)



HISTORY

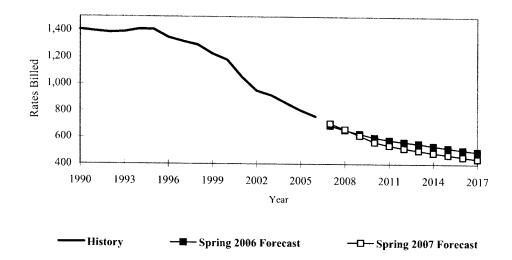
#### **AVERAGE ANNUAL GROWTH**

Year	Actual Rates Billed	Growth Rates Billed	0/0		Rates Billed Per Year	% Per Year
2002	7,975	-275	-3.3	History (2001 to 2006)	-173	-2.2
2003	7,788	-187	-2.3	History (1991 to 2006)	-87	-1.1
2004	7,578	-210	-2.7			
2005	7,479	-99	-1.3	Spring 2007 Forecast (2006 to 2017)	-49	-0.7
2006	7,387	-92	-1.2	Spring 2006 Forecast (2006 to 2017)	-2	0.0

**SPRING 2007 FORECAST** 

			Difference from Sp	ring 2006		
Year	Rates Billed	Rates Billed	%	Rates Billed	Rates Billed	%
2007	7,302	-85	-1.2	7,394	-92	-1.2
2008	7,250	-51	-0.7	7,380	-130	-1.8
2009	7,185	-65	-0.9	7,369	-184	-2.5
2010	7,119	-66	-0.9	7,359	-240	-3.3
2011	7,072	-47	-0.7	7,357	-285	-3.9
2012	7,027	-46	-0.6	7,361	-334	-4.5
2013	6,985	-41	-0.6	7,366	-380	-5.2
2014	6,948	-37	-0.5	7,362	-413	-5.6
2015	6,914	-34	-0.5	7,362	-447	-6.1
2016	6,882	-33	-0.5	7,361	-480	-6.5
2017	6,851	-31	-0.5	7,363	-512	-7.0

# Textile Rates Billed



#### **HISTORY**

Growth

%

**Rates Billed** 

Actual Rates Billed

Year

#### **AVERAGE ANNUAL GROWTH**

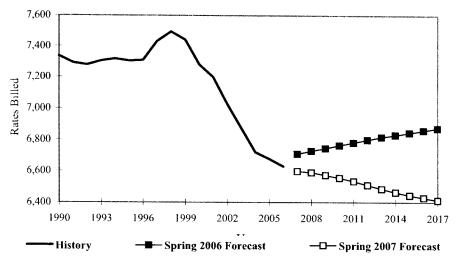
**Rates Billed** 

Per Year

2002	949	-103	-9.8	History (2001 to 2	2006)	-59	-6.4
2003	914	-35	-3.6	History (1991 to 2	•	-42	-4.0
2004	857	-57	-6.2	, (	,		1.0
2005	802	-56	-6.5	Spring 2007 Fore	cast (2006 to 2017)	-29	-4.9
2006	757	-45	-5.6		cast (2006 to 2017)	-24	-3.8
SPRIN	IG 2007 FORE	CAST		SPRING 2006	FORECAST		
		Growth			Difference from Sp	ring 2006	
Year	Rates Billed	Rates Billed	%	Rates Billed	Rates Billed	%	
2007	703	-54	-7.1	686	17	2.5	
2008	659	-45	-6.4	653	6	0.9	
2009	611	-47	-7.2	625	-14	-2.2	
2010	563	-48	-7.9	596	-33	-5.6	
2011	538	-26	-4.6	577	-40	-6.9	
2012	517	-21	-3.8	563	-46	-8.2	
2013	500	-17	-3.3	551	-51	-9.3	
	484	-16	-3.2	535	-50	-9.4	
2014	404						
	470	-14	-3.0	520	-50	-9.6	
2014 2015 2016		-14 -16	-3.0 -3.3	520 505	-50 -51	-9.6 -10.1	

% Per Year

# Other Industrial Rates Billed



**HISTORY** 

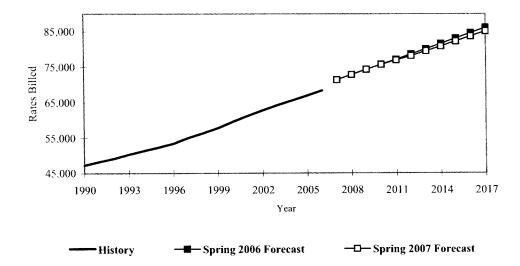
#### **AVERAGE ANNUAL GROWTH**

Year	Actual Rates Billed	Growth Rates Billed	%		Rates Billed Per Year	% Per Year
2002	7,026	-172	-2.4	History (2001 to 2006)	-114	-1.6
2003	6,874	-153	-2.2	History (1991 to 2006)	-44	-0.6
2004	6,720	-154	-2.2	,		
2005	6,677	-43	-0.6	Spring 2007 Forecast (2006 to 2017)	-20	-0.3
2006	6,629	-47	-0.7	Spring 2006 Forecast (2006 to 2017)	22	0.3

#### **SPRING 2007 FORECAST**

		Growth		Difference from Sp	Difference from Spring 2006		
Year	Rates Billed	Rates Billed	%	Rates Billed	Rates Billed	%	
2007	6,598	-31	-0.5	6,707	-109	-1.6	
2008	6,592	-6	-0.1	6,727	-135	-2.0	
2009	6,574	-18	-0.3	6,744	-171	-2.5	
2010	6,556	-17	-0.3	6,763	-207	-3.1	
2011	6,535	-21	-0.3	6,780	-245	-3.6	
2012	6,510	-25	-0.4	6,797	-287	-4.2	
2013	6,486	-24	-0.4	6,815	-329	-4.8	
2014	6,464	-21	-0.3	6,827	-363	-5.3	
2015	6,445	-19	-0.3	6,842	-398	-5.8	
2016	6,428	-17	-0.3	6,856	-428	-6.2	
2017	6,413	-15	-0.2	6,871	-458	-6.7	

# NP&L Billed Customers



#### **HISTORY**

#### **AVERAGE ANNUAL GROWTH**

Year	Actual Rates Billed	Growth Rates Billed	%		Rates Billed Per Year	% Per Year
2002	62.857	1,561	2.5	History (2001 to 2006)	1,419	2.2
2003	64,290	1,433	2.3	History (1991 to 2006)	1,342	2.4
2004	65,607	1,317	2.0			
2005	66,995	1,388	2.1	Spring 2007 Forecast (2006 to 2017)	1,521	2.0
2006	68,391	1,396	2.1	Spring 2006 Forecast (2006 to 2017)	1,613	2.1
SPRIN	IG 2007 FORE	CAST		SPRING 2006 FORECAST		

		Difference from Sp	ring 2006			
Year	Rates Billed	Rates Billed	%	Rates Billed	Rates Billed	%
2007	71,338	2,947	4.3	71,376	-38	-0.1
2008	72,832	1,494	2.1	72,842	-10	0.0
2009	74,326	1,494	2.1	74,308	18	0.0
2010	75,709	1,383	1.9	75,747	-38	-0.1
2011	76,926	1,217	1.6	77,165	-239	-0.3
2012	78,171	1.245	1.6	78,656	-485	-0.6
2013	79,517	1,346	1.7	80,148	-631	-0.8
2014	80,914	1,398	1.8	81,640	-726	-0.9
2015	82,329	1,415	1.7	83,132	-803	-1.0
2016	83,719	1,390	1.7	84,632	-913	-1.1
2017	85.121	1.402	1.7	86,134	-1,013	-1.2

# System Peaks

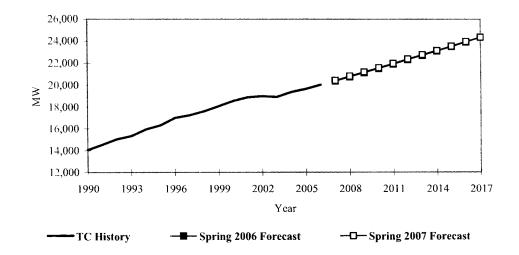
The Summer peak forecast represents the maximum coincidental demand during the summer season on the Duke Energy Carolinas system. It includes all Retail classes, Schedule 10A Resale, and total resource needs for Catawba Joint Owners. The peak forecast excludes the demand portion of contract sales to other utilities, and sales to NP&L, Seneca and Greenwood. It is expressed in MW at the point of generation and includes losses.

The last Summer peak occurred on Wednesday, August 2, 2006 at 4 p.m. An actual peak of 20,161 MW was achieved at a time when the temperature was 94 degrees (for the Spring 2007 Forecast the expected temperature at the time of summer peak is 94.7 degrees).

#### **Growth Forecasts**

The new forecast projects an incremental growth of 391 MW or 1.8% per year for 2006-2017. The previous forecast growth was 389 MW or 1.8% per year for 2006-2017.

# System Summer MW



#### **HISTORY**

#### **AVERAGE ANNUAL GROWTH**

Year	Temperature Corrected	Grov	vth		MW	%
	MW	MW	%		Per Year	Per Year
2002	19,009	100	0.5	History (2001 to 2006)	231	1.2
2003	18,943	-66	-0.3	History (1991 to 2006)	368	2.2
2004	19,400	. 457	2.4			
2005	19,669	269	1.4	Spring 2007 Forecast (2006 to 2017)	391	1.8
2006	20,062	393	2.0	Spring 2006 Forecast (2006 to 2017)	389	1.8

#### **SPRING 2007 FORECAST**

		Grow		Differenc	e from Spring 2006	
Year	MW	MW	%	MW	MW	%
2007	20,440	378	1.9	20,383	58	0.3
2008	20,828	388	1.9	20,756	72	0.3
2009	21,213	385	1.8	21,136	77	0.4
2010	21,595	382	1.8	21,517	78	0.4
2011	21,983	388	1.8	21,907	76	0.3
2012	22,373	390	1.8	22,309	64	0.3
2013	22,765	392	1.8	22,702	63	0.3
2014	23,158	392	1.7	23,097	60	0.3
2015	23,554	396	1.7	23,497	57	0.2
2016	23,953	400	1.7	23,911	43	0.2
2017	24,358	405	1.7	24,336	22	0.1

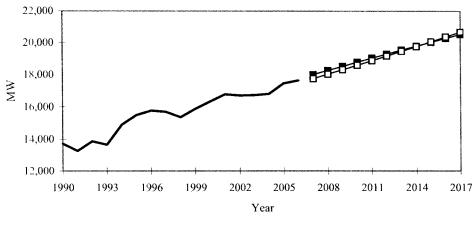
The Winter peak forecast represents the maximum coincidental demand during the winter season on the Duke Energy Carolinas' system. It includes all Retail classes, Schedule 10A Resale, and total resource needs for Catawba Joint Owners. The peak forecast excludes the demand portion of contract sales to other utilities, and sales to NP&L, Seneca and Greenwood. It is expressed in MW at the point of generation and includes losses.

The last Winter peak occurred on Tuesday, February 6, 2007 at 8 a.m. with an actual peak of 17,598 MW. This was achieved at a time when the temperature was 19 degrees (for the Spring 2007 Forecast the expected temperature at the time of winter peak is 18.0 degrees).

#### **Growth Forecasts**

The new Forecast projects an incremental growth of 275 MW or 1.4% per year from 2006-2017. The previous forecast growth was 262 MW or 1.4% per year from 2006-2017.

# System Winter MW



TC History —— Spring 2006 Forecast —— Spring 2007 Forecast

#### **HISTORY**

#### **AVERAGE ANNUAL GROWTH**

	Temperature					
Year	Corrected	Grov	vth		$\mathbf{M}\mathbf{W}$	%
	MW	MW	%	All the second s	Per Year	Per Year
2002	16,707	-73	-0.4	History (2001 to 2006)	173	1.0
2003	16,726	19	0.1	History (1991 to 2006)	292	1.9
2004	16,810	84	. 0.5			
2005	17,467	656	3.9	Spring 2007 Forecast (2006 to 2017)	275	1.4
2006	17,644	177	1.0	Spring 2006 Forecast (2006 to 2017)	262	1.4

#### **SPRING 2007 FORECAST**

		Grov	vth		Diffe	rence from Spring 2	.006
Year	MW	MW	0/0	MW	MW	%	
2007	17,755	111	0.6	18,012	-257	-1.4	
2008	18,038	283	1.6	18,269	-231	-1.3	
2009	18,316	278	1.5	18,530	-214	-1.2	
2010	18,592	276	1.5	18,784	-191	-1.0	
2011	18,880	288	1.5	19,042	-161	-0.8	
2012	19,172	292	1.5	19,298	-126	-0.7	
2013	19,466	294	1.5	19,546	-80	-0.4	
2014	19,760	294	1.5	19,789	-29	-0.1	
2015	20,058	298	1.5	20,030	28	0.1	
2016	20,361	303	1.5	20,277	84	0.4	
2017	20,670	309	1.5	20,528	142	0.7	

NP&L's forecasted seasonal peak demands at the hours of Duke Energy Carolinas' Summer and Winter peak are shown in the following table. All values are at generation level and include losses.

Year	Summer Peak MW	Winter Peak MW
2007	269	360
2008	278	370
2009	286	380
2010	295	390
2011	304	400
2012	313	409
2013	322	419
2014	331	429
2015	340	438
2016	349	448
2017	358	458

The Summer and Winter peak forecasts below represent the maximum coincidental demand during the summer and winter season for the area designated as "Native Load." Native Load includes for 2007 to 2008 all Retail classes, Resale, NP&L Total, the retained ownership of two of the four Catawba Joint Owners ( North Carolina Electric Membership Corporation and Saluda River Electric Cooperative, Inc.), a proportion of the supplemental requirements of Piedmont EMC and Rutherfordton EMC and all of the supplemental requirements of Blue Ridge EMC. Native Load includes for 2009 to 2010 all Retail classes, Resale, NP&L Total, the retained ownership of one of the four Catawba Joint Owners (North Carolina Electric Membership Corporation), a proportion of the supplemental requirements of Piedmont EMC and Rutherfordton EMC, all of the supplemental requirements of Blue Ridge EMC and hourly electricity sales to North Carolina EMC. Native Load includes for 2011 to 2016 all Retail classes, Resale, NP&L Total, the retained ownership of one of the four Catawba Joint Owners ( North Carolina Electric Membership Corporation), all of the supplemental requirements of Piedmont EMC, Rutherfordton EMC and Blue Ridge EMC and hourly electricity sales to North Carolina EMC.

Year	Summer Peak MW	Winter Peak MW
2007	17,870	15,725
2008	18,187	15,954
2009	18,422	16,084
2010	18,725	16,304
2011	19,297	16,800
2012	19,623	17,062
2013	19,947	17,303
2014	20,286	17,541
2015	20,620	17,763
2016	20,968	18,031
2017	21,303	18,298

The system load factor represents the relationship between annual energy and the maximum demand for the Duke Energy Carolinas' system. It is measured at generation level and excludes off-system sales and peaks.

